

**REMARKS**

The Office Action mailed September 19, 2008, has been received and reviewed. Claims 26-61 are currently pending in the application. Claims 26-61 stand rejected. Applicant has amended claims 26 and 40, and respectfully requests reconsideration of the application as amended herein. No new matter has been added.

**35 U.S.C. § 103(a) Obviousness Rejections**

Obviousness Rejection Based on U.S. Pat. Publ. No. 2003/0060195 A1 and U.S. Pat. No. 5,535,432

Claims 26-50 and 56-61 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2003/0060195 A1 to Dent ("Dent '195") in view of U.S. Patent No. 5,535,432 to Dent ("Dent '432").

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 985 (CCPA 1974); *see also* MPEP § 2143.03. Additionally, there must be "a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 167 L.Ed.2d 705, 75 USLW 4289, 82 U.S.P.Q.2d 1385 (2007). Finally, to establish a *prima facie* case of obviousness there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Furthermore, the reason that would have prompted the combination and the reasonable expectation of success must be found in the prior art, common knowledge, or the nature of the problem itself, and not based on the Applicants' disclosure. *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1367 (Fed. Cir. 2006); MPEP § 2144. Underlying the obvious determination is the fact that statutorily prohibited hindsight cannot be used. *KSR*, 127 S.Ct. at 1742; *DyStar*, 464 F.3d at 1367.

The 35 U.S.C. § 103(a) obviousness rejections of claims 26-50 and 56-61 are improper because the elements for a *prima facie* case of obviousness are not met. Specifically, the rejection fails to meet the criterion that the prior art reference must teach or suggest all the claims limitations.

Regarding independent claims 26 and 40, Applicant has amended independent claims

26 and 40 to further clarify claim elements not taught or suggested in the cited references. Applicant's amended independent claims 26 and 40 each respectively recite, in part, "*further circuitry being operable to receive an intermediate frequency (IF) common to each mode of operation and to supply a further signal to further RF circuitry*" (Applicant's amended independent claim 26) and "*further circuitry being operable to receive an intermediate frequency (IF) common to each mode of operation and to supply a further signal to the first and the second terminal RF stages*" (Applicant's amended independent claim 40). Applicant respectfully asserts that neither Dent '195 nor Dent '432, either individually or in any proper combination, teach or suggest such claim limitations.

The Office Action concedes:

In regards to claims 26, 40 [], ... Dent ('195), however, does not specifically disclose further circuitry, the further circuitry supplying a further signal to RF circuitry and being operable at an intermediate frequency common to each mode of operation. (Office Action, pp. 2-3).

The Office Action alleges:

Dent ('432), however, does disclose further circuitry, the *further circuitry supplying a further signal* (e.g., reference frequency signal) *to RF circuitry and being operable at an intermediate frequency common to each mode* (e.g., land based cellular network and orbiting satellite system) of operation (See col. 2 lines 6-30 and col. 5 lines 15-35). (Office Action, p. 3; emphasis added).

Applicant respectfully notes that neither of the alleged citations to Dent '432, namely col. 2 lines 6-30 and col. 5 lines 15-35, teach or suggest an intermediate frequency (IF) and, therefore, cannot teach "*further circuitry being operable to receive an intermediate frequency (IF) common to each mode of operation and to supply a further signal to further RF circuitry*" (Applicant's amended independent claim 26) and "*further circuitry being operable to receive an intermediate frequency (IF) common to each mode of operation and to supply a further signal to the first and the second terminal RF stages*" (Applicant's amended independent claim 40) as presently claimed by Applicant.

Applicant respectfully notes that Dent '432 in Figure 1 teaches an intermediate frequency (IF) for a first mode transmitter of radio 10 (GSM mode) of 6 MHz, and an IF for a second mode transmitter of radio 21 (satellite mode) of 450 kHz. Dent '432 further discloses an IF for a first mode receiver radio 10 (GSM mode) of a first IF of 150 MHz and second IF of 6 MHz, and a

first IF for a second mode receiver radio 21 (satellite mode) of 156.45 MHz and a second IF of 450 kHz. (Dent '432, col. 5, line 65-col. 6, line 15; col. 6, lines 16-29). In fact, Figure 1 of Dent '432 clearly identifies that the only commonality between the modes is the common synthesizer 34 since all of the other portions of the respective signal paths are separate and dedicated.

Therefore, since neither Dent '195 nor Dent '432 teach or suggest Applicant's claimed invention including "*further circuitry being operable to receive an intermediate frequency (IF) common to each mode of operation and to supply a further signal to further RF circuitry*" (Applicant's amended independent claim 26) and "*further circuitry being operable to receive an intermediate frequency (IF) common to each mode of operation and to supply a further signal to the first and the second terminal RF stages*" (Applicant's amended independent claim 40), these references, either individually or in any proper combination, cannot render obvious, under 35 U.S.C. §103, Applicant's invention as presently claimed in amended independent claims 26 and 40. Accordingly, Applicant respectfully requests the rejections of presently amended independent claims 26 and 40 be withdrawn.

Regarding dependent claims 27-39 and 56-60, the nonobviousness of independent claim 26 precludes a rejection of claims 27-39 and 56-60 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 26 and claims 27-39 and 56-60 which depend therefrom.

Regarding dependent claims 41-50 and 61, the nonobviousness of independent claim 40 precludes a rejection of claims 41-50 and 61 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 40 and claims 41-50 and 61 which depend therefrom.

Obviousness Rejection Based on U.S. Pat. Publ. No. 2003/0060195 A1, U.S. Pat. No. 5,535,432 and U.S. Pat. No. 5,943,324

Claims 51-55 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Dent '195" in view of Dent '432 and yet in further view of U.S. Patent No. 5,535,432 to Ramesh *et al.* ("Ramesh").

The nonobviousness of independent claim 26 precludes a rejection of claims 51-55 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, Applicant requests that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 26 and claims 51-55 which depend therefrom.

**CONCLUSION**

Claims 26-61 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, the Examiner is respectfully invited to contact Applicant's undersigned agent.

Respectfully submitted,

Dated: December 19, 2008

By: /Ramin Mobarhan, Reg# 50,182/  
**Ramin Mobarhan, Reg. No. 50,182**  
**(858) 658 2447**

QUALCOMM Incorporated  
5775 Morehouse Drive  
San Diego, California 92121  
Telephone: (858) 658-5787  
Facsimile: (858) 658-2502